ARCADIAN

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FORMAT CHANGES are in the works. Actually, we are getting too many ads, and they are starting to crowd out the editorial material. Starting next month, the largest ad accepted is 1/2 page, and we will shift the text areas to this two-column format.

BIT FIDDLER MOD if you haven't received an update describing the use of the 2000 baud system, drop them a line.

ADD-UNDER INTEREST remains high and we are accumulating a list of people seriously interested in the machine. I plan to send out a sort of Bulletin to those on the list as soon as there is definate word as to availability, etc., so if you want to be included in the 'first wave', and will have the cash to back it up, drop me a line.

TAPE LOADING DISCUSSION As a result of a number of questions from the newer subscribers, and the discovery of an anomaly, here are a few words regarding the loading of pre-packaged program from tape into the computer.

If you have a program on a tape, the following step-by-step procedure should result in a good load. The presentation is of a column of instructions for each of the units - the computer, the cassette deck, and the screen picture. Do these in order:

A. To load computer from tape.

COMPUTER	CASSETTE DECK	SCREEN
Cable from Basic Cartridge to "EARPHONE"		
1. RESET		>■
(Blue): (Words) INPUT GO		>:INPUT
	PLAY At beginning of loading, words on screen will slowly disappear, from top to bottom.	>:INPUT
	At end of loading, cursor reappears	>■
	STOP	

RUN GO

To load next program, start at Step 1.

PRINTING I am still looking for a scheme to be able to print from the 2000 baud cartridge. The current method uses the old Bally Basic, the Cassette Interface, and an internal tap therein to extract a TTL level signal. Those with a printer needing a 12-volt signal can utilize a booster circuit printed in Vol. 1, P. 47, or a new one-piece system using an LC1488 chip. We'll have a circuit next issue.

Robert Fabris 1982

STAR SIEGE ERRATA Well, I really got that one twisted. While the instructions are for Star Siege, the program is for QUADRON. The proper instructions follow:

QUADRON
(One Player)

This game challenges you to defend a four-walled energy fortress by pursuing and eliminating four monsters who are slowly impinging on the walls and intent on breaking through.

If a monster breaks completely through a wall (i.e. creates a "hole" or space the width of a wall) the fortress is destroyed. You start the game with a complement of four fortresses. The game ends when all four have been destroyed.

To eliminate a monster, you must move the joystick-controlled blip (it is in the center of the fortress when the game begins) toward the monster and "touch" it with the blip. The monster will then disappear. However, another will take its place on the same side of the wall at a distant starting point.

You will have a limited supply of energy with which to pursue the enemy. When you are running low on energy, the background color of the playfield will turn red as a warning.

This means you will soon have to return the fortress and eat one of the energy dots located inside. (to eat a dot move the blip over the dot) Otherwise, your speed will be cut in half and it will be very difficult to keep up with the monsters.

Eventually, you will eat up the eight energy dots. To gain a new supply of these, it is necessary to eat all sixty of the bonus dots located near the four edges of the playfield. (You will also receive sixty new bonus dots) When you accomplish this, the challenge will increase as the four monsters' starting points will move slightly closer to the fortress.

In summary, then, the game action consists of eliminating monsters to protect the fortress and eating dots to ensure your energy supply.

There are three basic routes you can follow in moving about the playfield.

1. Moving around the outside perimeter of the walls.
2. Passing through the inside of the fortress via the four openings in the walls.
3. Moving off one side of the playfield and appearing on the opposite side.

Use these alone and in combination to pursue monsters and eat dots.

SCORING

Monster.....200 points

Bonus Dot.....100 points

All Sixty Bonus Dots Eaten.....800 points

HAND CONTROL

Joystick.....Move the stick in the direction you wish to move the blip.

Trigger.....No Function

Knob.....No Function

The number of fortresses you have remaining is displayed in the upper left-hand part of the screen, while the current score is shown in the upper right-hand corner.

To start a new game, press any key (except "H".

TAPE LOADING PROBLEM We have noticed a random problem in loading programs from a tape into the machine.

o The screen starts to load "garbage" at the top, five or six lines of it, then the cursor reappears.

o A "fix" is to immediately stop the tape, reenter the : INPUT command (and GO), and PLAY the tape. The program should start loading immediately.

I don't know what the real problem is; it appears that the leading edge of the first leader tone sometimes sets the computer into thinking data is coming in, for about two seconds (when the cursor reappears). Since there is still about one second of leader tone, it is possible for the computer to catch the end of this tone and make a good load.

We are now loading our tapes with the volume control at zero, and as soon as the leader tone appears, we turn the volume control to the normal level. The leader then appears gradually to the computer, and we have not had a re-occurance of this problem. All tapes using this gradual scheme are coded with a green dot under the "baud rate" notation on the tape.

BLUE RAM EXPANSION BREAKTHROUGH!!

Perkins Engineering announces a New 16K BLUE RAM and a modified 8K Extended Basic Cartridge, with three UPDATE choices for 4K Blue Ram owners. Their tentative schedule is:

During May and June they offer to:

Expand your 4K Blue Ram to 16K for $135.95 and replace your BR extended Basic Cartridge at no extra charge!!

Ship a kit for Do-it-yourselfers at $99.95 with cartridge swap as above

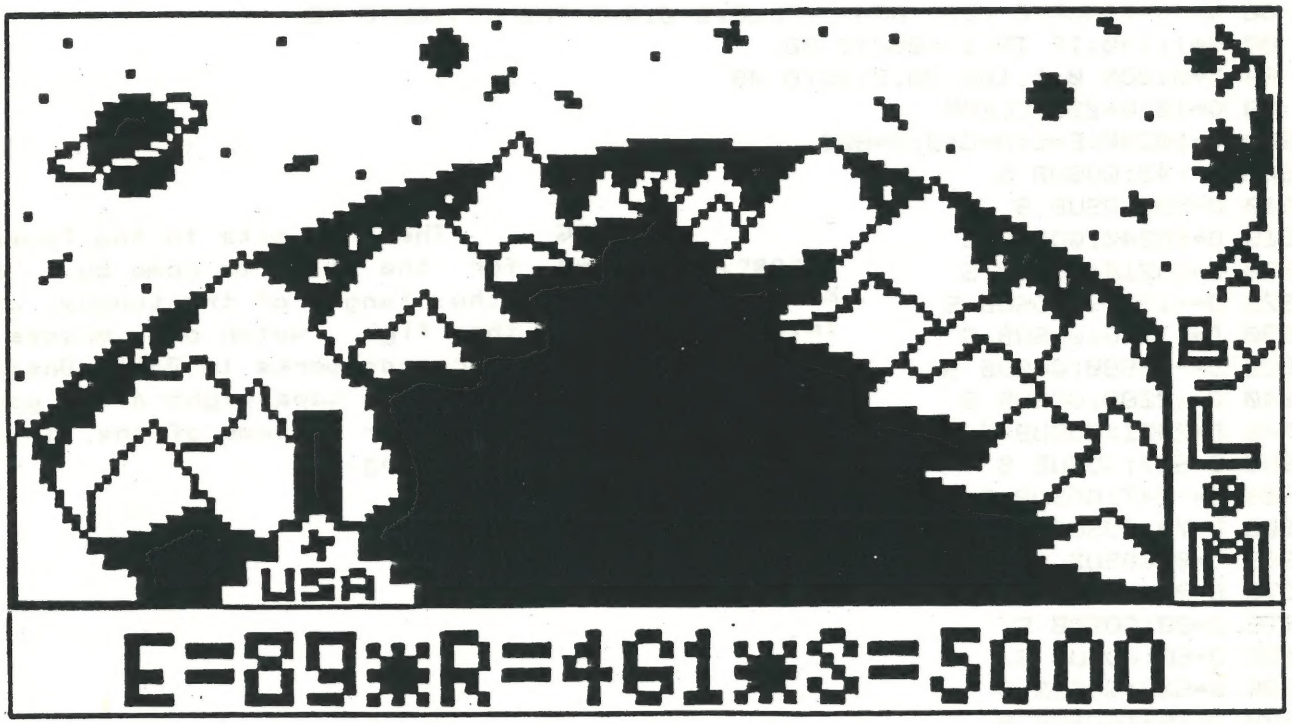
Sell you a set of plans for $5.

On or about July 1 they will begin shipping a NEW 16K BLUE RAM with printed circuit boards and a flexible link to the Arcade. Kit price $199.95, or assembled and tested $249.95

All other Blue Ram products and prices are unchanged at this time.

Cassette #14 $15.95
Alien Invasion and
Alien Invasion II

3 DIMENSION



Star Fleet Command has put you at the controls of a pulse-pounding photon cannon. Your orders are to stop the invasion of aliens war machines. It takes a cool head and a steady hand. Only you stand in their way. Can Earth be saved or will the aliens destroy your cannon and invade Earth?

Normally, a picture this detailed in 3-dimension would require more memory than is available in the Arcade program section. We have utilized a special Arcade feature called mass screen memory. There is almost 4K of memory available in this way. The game operation is contained in the 1.8K program memory section. By using both in a unique way this game, with expanded graphics, is possible. It is equivalent to about 5K of memory.

This is probably the best use of the Arcade graphics to date and the largest most detailed play field yet developed for Basic.

Call in your order, COD or Master Card, and we will deduct $1.00 from total.
1-812-853-6895 9AM to 9PM CST - for next day shipment!

For New Basic Only

L & M SOFTWARE

8599 Framewood Dr.
Newburgh, IN 47630

DEALER INQUIRY INVITED!!

IV-7

5-7-82

BALLY BASIC ONLY

```
  3 . FROG
  4 . BY BOB WISEMAN
  5 GOTO 99
 10 D=D+1;IF D>QGOTO 60
 20 T=T+1;IF T>RGOTO 80
 30 CALLB;BOX -75,0,4,40,2;IF TR(1)=0GOTO 10
 40 &(22)=96;BOX -44,-22,3,5,3;Z=KN(1)c8+28;LINE X+Z,Y+Z,3;IF PX(X+Z,Y+Z)GOTO 5
5
 50 S=S+6;LINE X+Z-7,Y+Z-7,3;BOX X+Z,Y+Z,13,13,2;BOX X+Z-7,Y+Z-7,1,1,3
 55 S=S-1;CX=I;PRINT S,;&(22)=3;LINE X,Y,3;BOX -44,-22,3,5,3;GOTO 10
 60 %(A)=256bRND (25)+6544;CALLE;D=0;Q=5+RND (7);GOTO 20
 80 S=1;T=0;IF TR(1)=0GOTO 80
 84 D=0;BOX 0,1,160,30,2;GOTO 40
 99 Q=10;R=255;CLEAR
500 C=20200;E=C;A=C+3;S=800
505 D=-43;GOSUB S
510 D=53;GOSUB S
515 D=10240;GOSUB S
520 D=20210;GOSUB S
525 D=-13871;GOSUB S
530 D=-1936;GOSUB S
535 D=-32690;GOSUB S
540 D=12288;GOSUB S
545 D=2432;GOSUB S
550 D=527;GOSUB S
555 D=-247;GOSUB S
560 D=78;GOSUB S
565 D=0;GOSUB S
570 D=30;GOSUB S
575 D=30;GOSUB S
580 D=56;GOSUB S
585 D=503;GOSUB S
590 D=255;GOSUB S
595 D=231;GOSUB S
600 D=32;GOSUB S
605 D=24;GOSUB S
610 D=0;GOSUB S
615 B=C;D=-43;GOSUB S
620 D=8231;GOSUB S
625 D=10307;GOSUB S
630 D=40;GOSUB S
635 D=17185;GOSUB S
640 D=-13871;GOSUB S
690 CLEAR ;X=-36;Y=-27;LINE X,Y,2
700 BOX -52,-31,33,25,1
705 BOX -59,-21,23,5,2
710 BOX -38,-21,5,5,2
715 BOX -44,-22,5,5,2
720 BOX -37,-37,5,13,2
725 BOX -44,-23,3,3,1
730 BOX -37,-27,3,1,2
735 BOX -42,-42,1,3,2
740 BOX -44,-42,1,3,2
745 BOX -47,-37,3,11,2
750 BOX -52,-38,7,1,2
755 BOX -48,-40,5,6,2
760 BOX -52,-42,3,1,2
765 BOX -52,-40,3,1,2
770 CY=32;CX=-50;BOX 0,32,120,16,3;BOX 0,32,118,14,3;PRINT "SCORE ",;I=CX
780 NT=1;&(21)=48;&(23)=32
785 &(22)=3;&(17)=230;&(16)=100
790 &(18)=100;GOTO 80
800 %(C)=D;C=C+2;RETURN
```

FROG The frog sits in the lower left corner, waiting for the flies to come by. Use the KNob to control the length of the tongue, and the TRigger to zap the fly. Watch out, misses count against you. This program works in Bally Basic only (BB), and must be saved on tape right after you load it - before you RUN it - as some of the 'insides' get destroyed while running.

Bob Wiseman
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Cincinnati, OH 45245

<CRYPT-O-GRAMS> Correction #2
The new line, 270, as added on p.55 should be corrected to show Kb2 at the very end - that is, multilply.

NEW LOCAL DEALER in the San Jose area is Sights and Sounds, at 1556 South Saratoga/Sunnyvale Rd., 95129. They plan to carry all third party products as well as the factory offerrings for the Arcade. And call them about space for a local user group meeting - contact Stan Sult.

WAVEMAKERS
BOX 94801
SCHAUMBURG, IL 60193

TAPE
‹11›

WHIZ QUIZ--TRIVIA. THIS IS THE FIRST PROGRAM OF IT'S KIND. IT'S NOT LIMITED BY THE AMOUNT OF MEMORY IN THE BALLY, SINCE ALL THE QUESTIONS ARE FED FROM THE TAPE TO THE COMPUTER. (OVER 250 TOTAL QUESTIONS) THESE ARE ALL MULTIPLE CHOICE QUESTIONS AND THE ANSWERS ARE SELECTED WITH THE HAND CONTROL. THE COMPUTER KEEPS TRACK OF RIGHT AND WRONG ANSWERS. WE'VE GIVEN YOU A BIG VARIETY OF QUESTIONS RANGING FROM ASTROLOGY TO TV TRIVIA. THEY MAY NOT SEPARATE THE DUMMYS FROM THE EINSTEINS BUT THEY SHOULD GIVE YOU A GOOD IDEA WHO KNOWS, WHAT'S WHAT,WHO'S WHO, HOW MANY, WHEN WAS, AND WHO CARES ANYWAY!!! FOR ALL THOSE WHO LOVE TRIVIA, DON'T MISS WAVEMAKERS TAPE 11 WHIZ QUIZ.

SUPER SOFTWARE
BOX 702
PLAINFIELD, NJ 07061-0702

PRESENTS:

Tape 12
DEFENSE FORCE

By Robert Rosenhouse

You are the defender of your planet's energy supply. A nonviolent group of aliens in desperate need of energy sources is invading your space sector for your limited supply of fuel. These endless hordes of invaders relentlessly attempt to appropriate your supplies for their own uses. But beware, for as time passes, increasing numbers of invaders appear. Do your best to belay the onslaught of marauders.

Damage: $10.00
Features machine language graphics
Available only in
Astro BASIC

Have you ordered your copy of the

SUMMER 1982
BALLY/ASTRO
SOURCEBOOK?

The SOURCEBOOK is a compilation of Known SOURCES of Hardware and Software Products for the BALLY/ASTRO Professional ARCADE. It contains the only available complete index and descriptions to the ARCADIAN programs and tutorials, also a catalog section with advertisements from over twenty SOURCES of Programs and Hardware Items.

The SOURCEBOOK is available for $ 7.00 in US Funds from:
RMH Enterprises
635 Los Alamos Ave.
Livermore, CA 94550

Are you interested in learning machine programming? Know some BASIC? Want to do it easily on the Bally? Z-80 minicourse (45pgs.) starts from the basics and takes you thru soft techniques used with the custom chips. Analogies to BASIC instructions throughout. Experiments, charts, diagrams, explanations, and full machine code documentation on the programs included. Useful time saving utilities for machine programming. Programs include: Color Scribble and Record-Draw and record full color creations. * Color Tunnel and Art-See over 100 movig colors. * Color formatter-Spruce up ypur existing programs with this add on. * Machine programming utility * American Flag * Logo * P.S.-- You don't have to know anything about programming to use and enjoy the programs--All that is required is Old Bally Basic-- --Sorry, not compatible with Astro Basic.-- PRICE $12.00 (Bound manual and C-20 Agfa tape w/programs.) Barry Ellerson * 5017 N. River Rd. * Schiller Pk., Ill. 60176

```
  2 .
  3 . NIGHT RAID
  4 . BY PAUL SLEZAK
  5 T=0;N=3;O=5;K=0;P=0;F=0;H=1;G=38
 10 BC=0;NT=3
 20 CLEAR ;GOSUB 900;CLEAR ;NT=0;&(22)=180
 30 X=75;Y=G;Z=70
 40 GOSUB 700;GOSUB 780
 50 GOSUB 800
 60 B=BbH;X=X-B;Z=Z-B
 80 IF K=5GOTO 100
 90 K=RND (10);IF K#5GOTO 110
 95 Q=X;R=Y
100 R=R-RND (10);GOSUB 600
110 IF KN(1)#DGOSUB 800
120 IF P=1GOSUB 500;GOTO 140
130 IF TR(1)=1GOSUB 500;P=1
140 GOTO 40
400 FOR I=1TO 15
410 GOSUB 790
420 BC=90;BC=82;BC=0
430 NEXT I;GOSUB 792;P=0;O=O-1;IF O<1GOTO 1000
440 X=RND (2);IF X=2GOTO 460
450 X=75;Z=70;H=1;GOTO 470
460 X=-70;Z=-75;H=-1
470 G=G-7;IF G<-30GOTO 1100
480 Y=G;GOTO 40
500 IF P=1GOTO 520
510 S=D;T=-32;FOR I=1TO 5;&(23)=255;&(21)=255;NEXT I;&(23)=0;&(21)=0
520 BOX S,T,1,3,1;BOX S,T,1,3,3
530 IF Y<=TIF Z<=SIF S<=XGOTO 400
540 T=T+15;IF T>Y+8P=0
550 RETURN
600 &(16)=50;IF RND (50)=30Q=D
605 IF R>-36RETURN
610 &(16)=255;IF Q<=D+10IF D-10<=QGOTO 630
620 K=0;RETURN
630 FOR I=1TO 12;GOSUB 790
640 BC=5;BC=10;BC=11;BC=14;BC=0;NEXT I
650 GOSUB 792;P=0;K=0;N=N-1;IF N=0GOTO 950
660 RETURN
700 BOX X,Y,1,1,1
710 BOX Z,Y,1,1,1
720 BOX X,Y,1,1,3
730 BOX Z,Y,1,1,3
740 Y=G;Y=Y-(RND (7)-1)
750 B=RND (8);IF H=1IF Z<-75GOTO 440
760 IF H=-1IF Z>75GOTO 440
770 RETURN
780 &(16)=255;&(17)=255;&(18)=255;RETURN
790 &(20)=205;&(23)=250;&(21)=80;&(18)=100;&(22)=255;RETURN
792 &(18)=255;&(23)=0;&(21)=0;&(20)=0;&(22)=180;RETURN
800 IF F#0BOX D,-40,3,3,3;BOX D,-36,1,3,3
810 D=KN(1);F=1;IF D>75D=75
820 IF D<-75D=-75
830 BOX D,-40,3,3,1;BOX D,-36,1,3,1;RETURN
900 FOR C=1TO 3;FC=5;CLEAR ;CY=0;CX=-55
910 PRINT "N I G H T   R A I D"
```

EITHER ASTROBASIC or BALLY BASIC

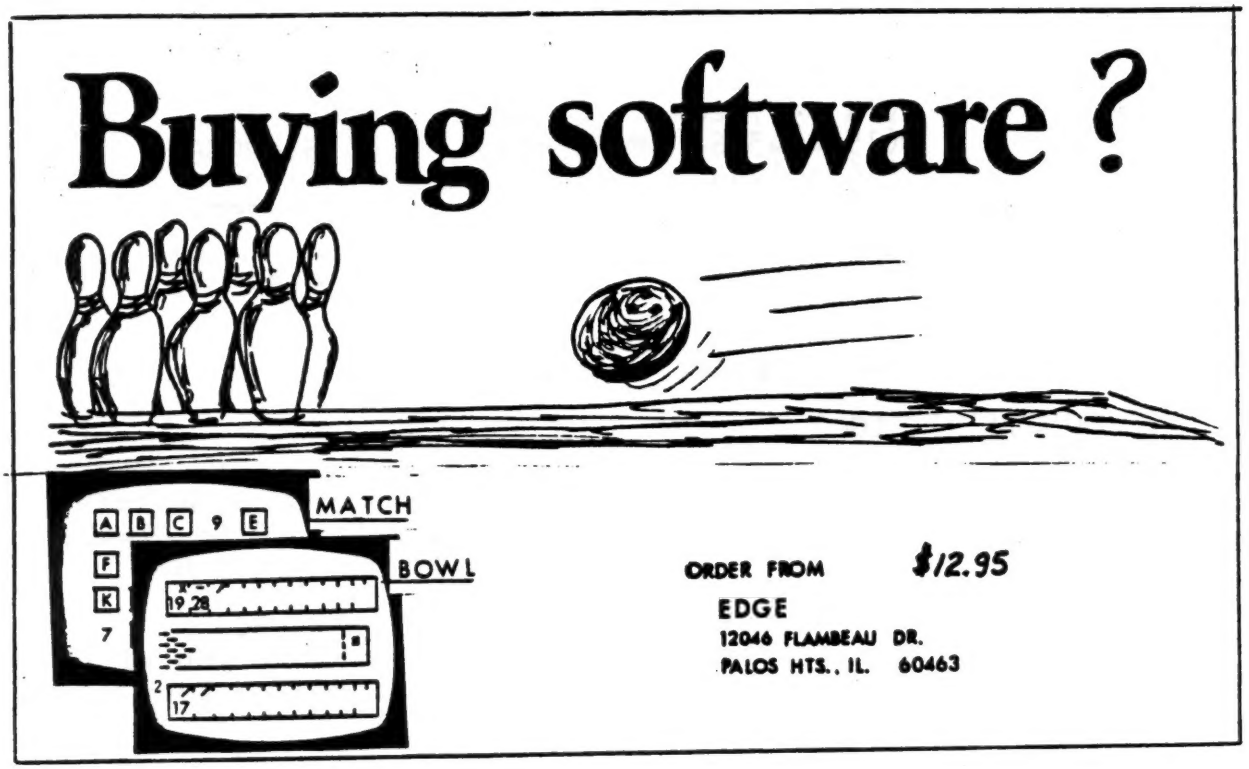
NIGHT RAID A squadron of 5 bombers has been sent to destroy us at night. We have 3 bases as defense. Only 1 bomber strikes at a time, but it has the ability to locate the base. You will be able to see the lights of the aircraft as it moves overhead, but not the bombs it drops. Another objective of the bomber is to land. If it does so, destroy the base. Blue flashes indicate a bomb hit, red flashes indicate a destroyed bomber. Use KNob to move base, hold TRigger down to launch anti-aircraft missile.

Paul Slezak
1104 S. Neltnor
West Chicago, IL 60185

As of 3 May, the name of the manufacturer of the Arcade and Videocades is ASTROCADE inc.

Also, the Bally name is being deleted from all printed matter.

```
 930 FOR E=1TO 25;NEXT E
 940 NEXT C;FC=84;RETURN
 950 FC=5;CLEAR
 960 PRINT " OH,WONDERFUL
 970 PRINT "     NOW WHAT !!!!!!!
 980 PRINT "WE'VE GOT NO DEFENSE LEFT";CY=0;GOTO 1120
1000 CLEAR ;PRINT "YOU HAVED SAVED US !!!!
1005 CY=0
1010 PRINT "YOU EVEN LEFT US WITH ",#1,N;PRINT "BASES
1020 GOSUB 792;NT=1;STOP
1100 NT=1;CLEAR ;CY=0
1110 PRINT "THE BOMBER HAS LANDED"
1120 PRINT "PREPARE TO DETONATE T.N.T.
1499 FOR A=1TO 3000;NEXT A;CLEAR
1500 BOX 0,-15,30,30,1;Y=5;Z=20
1510 FOR I=1TO 10;BOX 0,Y,2,30,1
1520 BOX 0,Z,10,2,1
1525 BOX 0,Z,10,2,3
1530 Z=Z-2;Y=Y-2;NEXT I
1540 BOX 0,-15,30,30,3
1550 FOR I=30TO 160STEP 5
1560 GOSUB 790
1570 FC=5;BC=84;FC=10;BC=90;FC=11
1571 BC=93;FC=14;BC=95;FC=85;BC=0
1580 BOX 0,0,I,Ic2,1;NEXT I
1585 BC=85;NT=0;CY=0;CX=-30;PRINT "GAME OVER
1590 FC=0;NT=1;GOSUB 792;&(22)=0
```

INSTRUCTIONS EITHER ASTROBASIC or BALLY BASIC

Stranded On Rigel 5: In this program you are stranded on Rigel 5. After you have typed in the program and all other values (see Caution) run the program. The landscape of Rigel 5 will appear and a strange noise will occur. Press any key. The computer will respond with a question mark. This is the skill level (1--easy, 2--advanced, 3--suicidal). When the computer asks you to input the code, press 5 different digits. The computer will respond with something like this: 3-2. This means that 3 numbers appear in the code and 2 numbers are in the right place. You have 8 tries at this code. This is a sample run to break the code (say the code is 62371 for example):

INPUT	CODE
12345	3-2
12367	5-2
62317	5-3
62371	5-5

(3 means numbers in the code. 2 means numbers in the right place.)

After you input the right code your ship will appear. Press any key. You will then fight the "Rigelian" ships. You need to have a quick trigger finger since the ships will appear constantly. By the way, you only have 5 tries to escape.

After you have typed in the program input the following:

@(0)=-43	@(10)=-247	@(20)=1792	@(30)=0	@(40)=8128
@(1)=19253	@(11)=14414	@(21)=16128	@(31)=1102	@(41)=32512
@(2)=10240	@(12)=-512	@(22)=13024	@(32)=1024	@(42)=-21824
@(3)=20210	@(13)=-512	@(23)=16224	@(33)=1024	@(43)=32672
@(4)=-13871	@(14)=-17920	@(24)=5600	@(34)=3584	@(44)=8128
@(5)=-1936	@(15)=14336	@(25)=5952	@(35)=7936	@(45)=3584
@(6)=-32434	@(16)=31744	@(26)=14912	@(36)=7936	@(46)=32512
@(7)=12288	@(17)=27648	@(27)=736	@(37)=7936	@(47)=25792
@(8)=2432	@(18)=-14848	@(28)=1792	@(38)=15104	@(48)=-3648
@(9)=527	@(19)=0	@(29)=0	@(39)=31616	@(49)=224
				@(50)=0

To record the program, type the following:

```
B=%(20050)+102  (GO)
A=-24576  (GO)
:PRINT; CLEAR; PRINT "A=",A,";B=",B,";FOR N=A TO B;%(N)=KP;
NEXT N; %(20050)=B-102; :RETURN; RUN"; FOR N=A TO B; CY=40;
TV=%(N); NEXT N; :RETURN  (Start recorder and press GO)
```

CAUTION! Make sure the entire program is correct.

If you stop the program while it is running, you will have to retype the values of @(0) to @(10) because they are wiped out when the program is run.

Have Fun!

$100 Prizewinner!

STRANDED AT RIGEL is a two-part game, where you have to determine the code that the machine generates, and having successfully passed that test, you have the villains to contend with. If this portion becomes too difficult, one should be able to bypass this area by a GOTO 500 command.

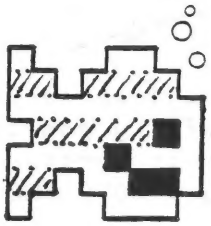
```
  6 W=20200;Y=W+13;R=W+3;F=-40;BC=0;FC=126;CLEAR ;FOR A=-80TO 80;LINE A,-40,0;F
=F+RND (3)-2;IF F<-40F=-40
  7 LINE A,F,1;IF A>50BOX RND (160)-80,RND (70)-40,1,1,1
 10 NEXT A;PRINT "   STRANDED ON RIGEL 5";P=0;FOR A=17TO 20;&(A)=7;NEXT A;&(16)
=92;&(22)=-1;IF KPINPUT S
 80 GOSUB 900;O=0;K=20;GOSUB 749+(P>0)
100 CLEAR ;BOX -50,32,60,1,1;BOX -42,-5,1,74,1;P=0;BOX 0,0,3,87,1;BOX -5,0,10,2
,1;%(Y)=128;%(R)=8774
105 CALLW;FOR A=0TO 4
110 @(A)=RND (10)-1;FOR Q=0TO A-1;IF A=0NEXT A
111 IF @(A)=@(Q)GOTO 110
120 NEXT Q;NEXT A;PRINT "INPUT CODE";PRINT
124 FOR P=1TO 8;FOR A=5TO 9
125 @(A)=KP-48;IF (@(A)<0)+(@(A)>9)GOTO 125
126 TV=@(A)+48;NEXT A;C=0;D=0;FOR A=0TO 4;IF @(A)=@(A+5)C=C+1
140 FOR Q=5TO 9;IF @(A)=@(Q)D=D+1
143 NEXT Q;NEXT A;CX=-36;PRINT #0,D,"-",#0,C;IF C=5GOTO 180
161 FOR A=17TO 20;&(A)=-1;NEXT A;&(16)=33;&(22)=Pb31;NEXT P
170 %(Y)=129;%(R)=67:CALLW:N=9
172 FOR A=32TO NSTEP -5;&(18)=-A;BOX -7,A,2,5,3;BOX -7,A,2,5,3;NEXT A;BOX -7,N,
7,2,2;N=N-2;IF N>2GOTO 172
175 GOSUB 700;GOTO 190
180 BOX 0,6,3,10,2;BOX 16,0,35,1,1;BOX 40,-30,50,5,1;BOX 40,-13,30,30,1;BOX 40,
4,20,5,1;BOX 40,14,5,16,1;BOX 40,-30,5,5,2
190 GOSUB 900;CX=12;CY=40;PRINT "CODE WAS:";CX=21;FOR A=0TO 4;PRINT #0,@(A),;NE
XT A;IF KPIF P=9GOTO 100
500 K=0;GOSUB 750
510 CLEAR ;E=0;FOR A=1TO 30;BOX RND (160)-80,RND (88)-44,1,1,1;NEXT A;FOR T=1TO
3;GOSUB 600;NEXT T;V=80;H=V
520 FOR N=1TO RND (8-S)b14;H=H+JX(1)b4;%(R)=20480+H;CALLW;IF TR(1)&(22)=-1;GOSU
B 580
530 CALLW;NEXT N;FOR A=48-Tb10TO 40STEP 10;FOR B=-74TO 80STEP 16;IF PX(B,A)GOSU
B 600;T=T+1;GOTO 520
540 NEXT B;T=T-1;NEXT A;CALLW;GOTO 800
580 FOR A=-32TO 40STEP 10;BOX H-74,A,2,5,3;BOX H-74,A,2,5,3
581 &(18)=A;IF PX(H-74,A)BOX H-75,A+1,11,9,2;&(21)=-1;&(23)=9;GOSUB 900;RETURN

590 NEXT A;E=E+1;RETURN
600 %(Y)=129;FOR A=0TO 9;%(R)=2560bT+Ab16;CALLW;NEXT A;%(Y)=128;IF T#8RETURN
610 FOR A=1TO 40;MU=3;NEXT A;GOSUB 700;GOTO 510
700 FOR Z=1TO 7;&(21)=-1;&(18)=99;&(19)=99;&(16)=1;&(23)=9;BC=7-Z;NEXT Z;GOSUB
900;O=O+1;IF O<5RETURN
710 CLEAR ;PRINT "YOUR 5 LIVES ARE GONE";PRINT "YOU HAVE FAILED!";IF KPGOTO 80
749 FOR A=0TO 10;C=W+Ab2;%(C)=@(A);NEXT A
750 C=Y+7;FOR A=31-KTO 50-K;C=C+2;%(C)=@(A);NEXT A;RETURN
800 FOR A=16TO 19;&(A)=60;NEXT A;&(21)=89;&(22)=-1;&(23)=61;FOR A=1TO 15;PRINT
;NEXT A;GOSUB 900;PRINT "GREAT!
810 PRINT "EFFICIENCY IS",100-Ob9-P-E+Sb3,"%";IF KPGOTO 80
900 FOR Z=16TO 23;&(Z)=0;NEXT Z;RETURN
```

Sean Walsh
7060 S. Marshall St.
Littleton, CO 80123

5.7.82

New from The Bit Fiddlers™



Our
Catalog:

Machine Language Manager....$54.95
Goldfish Demo.....5.00
Goldfish Listing.....3.00

CA Residents,
please add 6% sales tax

GOLDFISH DEMO!

Actually they're Neon Tetras, but that would make the name too long. This demo tape is designed to show the power of the Machine Language Manager cartridge. It's a relatively short program, but it independently controls the actions of 7 goldfish, a digital clock, and the meowing of the cat. And it's in 4 colors.

Animation is smooth, and non-blinking. And GOLDFISH does not require MLM to run. The program will run with Bally Basic, Astrovision Basic, and MLM.

An interesting sidelight: Once loaded and running, GOLDFISH no longer needs a cartridge in the slot. You can remove it and the program will keep running until you hit RESET.

The
Bit Fiddlers T.M.
Computer Products
For Work and Play

(714) 565-1610
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ANNOUNCING A BREAKTHROUGH!

We are now able to store and retrieve MLM programs reliably using the Astrovision Basic cartridge. So now, you have the option of using either the old 300 Baud cassette interface, or the new Astrovision Basic cartridge. Quite a breakthrough, we think!

I have an extra Space Fortress cartridge, in the box in perfect condition. I would like to trade this for any Bally road race game. Call 217-789-2102, between 8:30 AM and 5 PM, and ask for Steve or Janeene to arrange trade.

Will pay $50 to $100 cash for broken Bally Arcades - send your phone number or ship unit to: R. O'Meara 3178 Arizona Way, Marcellus, NY 13108 315-673-2359

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